

EMERSON'S BATCH BLENDING VESSELS

Ensure Higher-Accuracy Blending, Reduce Cycle Time, and Eliminate Contamination

Batch Blending Vessels (BBVs) are equipped with a blend kettle that is traditionally mounted on a load cell, Clean-In-Place (CIP) technologies, and integrated controls to automate all steps involved in batch blending including dosing, heating, mixing, rinsing and discharge.

How It Works

Major and minor blend components are connected in a piping header to the roof of a cone shaped, mixing vessel through dedicated piping. Through this inlet header, components are sequentially dosed from raw material storage tanks, drum decant units, other blenders, or through a manual gauge hatch into a vessel that is mounted on load cells. The vessel is automatically heated through half-pipe coils with multiple zones for efficient heating. An agitator is used to mix the components according to recipe requirements. When heating and mixing is completed, the product can be discharged through a piggable header to storage. Spray nozzles, utilize the balance of raw material in order to rinse equipment, prevent the generation of slop, and rinse the equipment.

Applications

On-spec, efficient performance for industrial batch applications where sequential component addition and temperature control is critical such as:

- Chemicals, Additives, and Specialty Chemical Blending
- Lubricant Blending

Key Specifications

Materials:	Stainless Steel
Vessel sizes:	5, 10, 20 metric tons

Features and Benefits

- Eliminate manual dosing and cleaning for safer, efficient operations with fully automated system for entire blending operation
- Remove risk of cross-contamination and component waste through CIP technologies such as a heated rinse tank to clean and empty vessel, drum, or tote
- Add components manually through gauge hatch per recipe requirements
- Verify system performance with Emerson's performance guarantees
- Directly transfer components from Drum Decant Units into the batch without a requiring pre-mix

Batch Blending Vessels are an engineered solution. Consult your Emerson representative for more details.

www.emerson.com/integratedblendingsolutions



Two 10 ton batch blending vessels and one 5 ton vessel used to blend small volume lubricant batches.



Emerson's Batch Blending Vessels installed at a Lubricant Blending plant in China.



Emerson's Drum Decant Units can be configured to directly feed components stored in drums or totes into our Batch Blending Vessels with no pre-mix required.

Photos courtesy of Copton.